

1 CLAIMS

I claim:

1.

5 A tool for use with a vehicle holding system which is a part of a vehicle frame
straightening apparatus including one or more upstanding supports having a vertically
disposed socket at its upper end, comprising:

a first upstanding socket insert sleeve adapted to be inserted into the socket;

10 a first support, having inner and outer ends, secured at its inner end to the upper end of
said sleeve and extending generally horizontally therefrom;

a second support, having upper and lower ends, secured to the outer end of said first
support;

15 a first hollow tubular member secured to said second support and extending generally
horizontally therefrom;

a second tubular member selectively rotatably mounted within said first tubular member
and having inner and outer ends;

a third support secured to the outer end of said second tubular member and extending
generally transversely with respect thereto;

20 and a retainer selectively connecting said first and second tubular members so that said
second and third supports define a frame receiving socket adapted to receive a
vehicle frame therein.

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2.

The tool of claim 1 wherein said second tubular member is selectively positioned with respect to said first tubular member to vary the distance between said second and third supports.

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3.

The tool of claim 1 wherein said first socket insert sleeve is selectively vertically adjustably secured to the upstanding support of the vehicle frame straightening apparatus.

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4.

The tool of claim 1 wherein the socket has a quadrilateral-shaped cross-section and wherein said first socket insert sleeve has a quadrilateral-shaped cross-section.

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The tool of claim 3 wherein the socket has a quadrilateral-shaped cross-section and therein said first socket insert sleeve has a quadrilateral-shaped cross-section.

6.

The tool of claim 1 wherein a bolt member connects said first socket insert sleeve to the upstanding support of the vehicle frame straightening apparatus.

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The tool of claim 1 wherein a fourth support is secured to said first tubular member at the upper end thereof.

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The tool of claim 1 wherein said first, second and third supports each comprise a plate.

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The tool of claim 7 wherein said first, second, third and fourth supports each comprise a plate.

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The tool of claim 1 wherein said sleeve has a round cross-section.

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11.

The tool of claim 1 wherein a pipe stub is secured to said first support and extends downwardly therefrom and wherein said sleeve is selectively removably secured to said pipe stub.

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12.

A tool for use with a vehicle holding system which is a part of a vehicle frame straightening apparatus including one or more upstanding supports having a vertically disposed socket at its upper end, comprising:

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a first upstanding support, having upper and lower ends, adapted to be inserted into the socket;

a first hollow sleeve, having inner and outer ends and upper and lower ends, positioned on the upper end of said first support;

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a second generally vertically disposed support, having upper and lower ends, secured to said first hollow sleeve at said outer end thereof;

1 a first hollow tubular member secured to said second support and extending generally
horizontally therefrom;
a second tubular member selectively rotatably mounted within said first tubular member
and having inner and outer ends;
5 a third support secured to the outer end of said second tubular member and extending
generally transversely with respect thereto;
and a retainer selectively connecting said first and second tubular members so that said
second and third supports define a frame receiving socket adapted to receive a
10 vehicle frame therein.

13.

The tool of claim 12 wherein said second tubular member is selectively
positioned with respect to said first tubular member to vary the distance between said
second and third supports.

14.

The tool of claim 12 wherein said first upstanding support is provided with a
reduced thickness portion defining a shoulder and wherein said first hollow sleeve is
positioned on said reduced thickness portion so that said lower end of said first sleeve
20 engages said shoulder.

15.

The tool of claim 13 wherein a spacer is provided between said first hollow
sleeve and said second support.

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16.

The tool of claim 12 wherein said first support has a quadrilateral cross-section and wherein said first hollow sleeve has a quadrilateral cross-section.

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17.

The tool of claim 12 wherein said second and third supports each comprise a plate.

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18.

The tool of claim 12 further including a shim selectively removably positioned between said second and third supports.

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